

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

IN RE: GOOGLE DIGITAL ADVERTISING
ANTITRUST LITIGATION

No. 1:21-md-3010 (PKC)

This Document Relates to:

IN RE: GOOGLE DIGITAL PUBLISHER
LITIGATION

No. 1:21-cv-7034 (PKC)

DEFENDANTS GOOGLE LLC, ALPHABET INC., AND YOUTUBE, LLC'S
MEMORANDUM OF LAW IN SUPPORT OF THEIR MOTION TO EXCLUDE THE
EXPERT TESTIMONY OF PROF. EINER ELHAUGE

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	BACKGROUND	2
A.	Tools for Web Advertising	2
B.	Tools for App Advertising.....	4
C.	Prof. Elhauge’s Damages Calculations.....	6
III.	LEGAL STANDARD.....	7
IV.	ARGUMENT.....	9
A.	A Yardstick Analysis Must Compare Similar Markets and Control for Differences Between Them.....	9
B.	Prof. Elhauge Ignores That Publishers Receive More Services When They Sell Web Ads on AdX and AdSense Than When They Sell App Ads Using Third-Party SDKs.	12
C.	Prof. Elhauge Fails to Control for Alleged Differences in Competitive Conditions for Web and App Transactions.....	18
V.	CONCLUSION.....	20

TABLE OF AUTHORITIES**Cases**

<i>Amorgianos v. Nat’l R.R. Passenger Corp.</i> , 303 F.3d 256 (2d Cir. 2002).....	8
<i>Berkey Photo, Inc. v. Eastman Kodak Co.</i> , 603 F.2d 263 (2d Cir. 1979).....	19, 20
<i>Blue Cross & Blue Shield United of Wis. v. Marshfield Clinic</i> , 152 F.3d 588 (7th Cir. 1998).....	12, 20
<i>Bobcar Media, LLC v. Aardvark Event Logistics, Inc.</i> , 554 F. Supp. 3d 606 (S.D.N.Y. 2020).....	8
<i>City of Rockford v. Mallinckrodt ARD, Inc.</i> , 2024 WL 1363544 (N.D. Ill. Mar. 29, 2024).....	11, 12, 18, 20
<i>Daubert v. Merrell Dow Pharms., Inc.</i> , 509 U.S. 579 (1993).....	8
<i>Gen. Elec. Co. v. Joiner</i> , 522 U.S. 136 (1997).....	8
<i>In re Mirena IUS Levonorgestrel-Related Prods. Liab. Litig. (No. II)</i> , 982 F.3d 113 (2d Cir. 2020).....	8
<i>In re Pfizer Inc. Sec. Litig.</i> , 819 F.3d 642 (2d Cir. 2016).....	7
<i>In re Pharmacy Benefit Managers Antitrust Litig.</i> , 2017 WL 275398 (E.D. Pa. Jan. 18, 2017).....	11
<i>In re Wholesale Grocery Prods. Antitrust Litig.</i> , 946 F.3d 995 (8th Cir. 2019).....	10, 11, 12, 18
<i>Major League Baseball Props., Inc. v. Salvino, Inc.</i> , 542 F.3d 290 (2d Cir. 2008).....	8
<i>Tang Cap. Partners, LP v. BRC Inc.</i> , 757 F. Supp. 3d 363 (S.D.N.Y. 2024).....	8
<i>U.S. Football League v. Nat’l Football League</i> , 842 F.2d 1335 (2d Cir. 1988).....	20
<i>Weiner v. Snapple Beverage Corp.</i> , 2010 WL 3119452 (S.D.N.Y. Aug. 5, 2010).....	11

Rules

Fed. R. Evid. 702	8
-------------------------	---

Other Authorities

ABA SECTION OF ANTITRUST LAW, ECONOMETRICS (2d ed. 2014).....	10
Daniel L. Rubinfeld, <i>Antitrust Damages</i> , in RESEARCH HANDBOOK ON THE ECONOMICS OF ANTITRUST LAW 378 (Einer Elhauge ed., 2013).....	9, 10

I. INTRODUCTION

In support of their claim for significant damages, Publishers offer the opinions of Professor Einer Elhauge, who hypothesizes that if Google had not engaged in anticompetitive tying, it would have charged publishers a 10% commission for facilitating sales of display ads on websites, rather than the roughly 20% that it actually charges. Prof. Elhauge arrived at his 10% “yardstick” rate not by analyzing the terabytes of data about web transactions that Google produced in this case, but instead by reviewing a few internal documents discussing the rate that Google charges to facilitate sales of certain ads in mobile apps.

Prof. Elhauge used the rate for certain app ad transactions as his yardstick because he thought they were “similar” to web ad transactions. They are not. Google provides significantly more and better service to publishers that use AdX and AdSense for web transactions than for the app transactions comprising Prof. Elhauge’s yardstick. AdX and AdSense publishers benefit from Google integrating demand from multiple buyers, better reporting, and strong protections from spam and fraud. Publishers receive much less from Google on the yardstick app transactions, but Prof. Elhauge makes no effort to adjust his yardstick rate for the differences in quality. Prof. Elhauge also fails to analyze whether different competitive conditions could explain the rate differential between web and app transactions, despite asserting that Google has enough market power to maintain elevated prices in his alleged web markets, while also claiming that competition forced Google to lower its rates for certain app transactions.

Rather than control for quality and competition, Prof. Elhauge’s approach simply assumes that the entire difference in the rates for web and app transactions can be attributed to the alleged tying restraints. The scholarly literature on which he relies and cases analyzing the yardstick methodology recognize, however, that an expert must control for factors that could explain such price differences (other than the conduct at issue). Prof. Elhauge’s failure to do so is an unreliable

application of the yardstick methodology to the facts of this case, so his damages opinions should be excluded.

II. BACKGROUND

Digital advertising technology (“ad tech”) tools are pieces of software for buying and selling ads shown to users of internet-connected devices, such as computers and smartphones. Ad tech includes an array of products that together make up the “ad tech stack” that connects digital publishers and advertisers.¹ These products include tools for both (i) publishers, which sell space on their websites and mobile applications (“apps”) where advertising can be shown to users; and (ii) advertisers, which purchase that inventory.² Working together, ad tech tools allow publishers and advertisers to transact “impressions,” each of which involves displaying a specific ad to a specific user visiting a specific publisher property at a specific moment in time.³ Although publishers can use some ad tech tools to sell both web and app impressions, there are important differences between how the tools can be used to sell web and app impressions.

A. Tools for Web Advertising

Publishers use ad servers and ad auction platforms to sell their web inventory. Ad servers enable publishers to manage web impressions sold either directly to advertisers (“direct deals”) or indirectly via ad auction platforms.⁴ Ad auction platforms conduct auctions where bids submitted by many ad buying tools (on behalf of advertisers) compete in real time for web impression

¹ Publishers’ First Amended Consolidated Class Action Complaint (ECF No. 408) (“Publ. Compl.”) ¶ 70.

² *Id.* ¶ 125.

³ *Id.* ¶ 6.

⁴ *Id.* ¶ 113; *see also* ECF No. 959 (“Earnhardt Decl.”), Ex. 1 (Elhauge Rep.) ¶¶ 14-15. According to Plaintiffs’ experts, ad auction platforms include ad exchanges and ad networks that conduct auctions (e.g., Google’s AdSense). *See* Earnhardt Decl., Ex. 1 (Elhauge Rep.) ¶¶ 193-194; *see also* Earnhardt Decl., Ex. 4 (Elhauge Tr.) 23:16-24 (For ad networks, my investigation revealed that there was a lot of confusion about what the terminology meant in the documents, comma [*sic*], but I took it to refer to a more basic ad auction platform. In particular, I believe they equated AdSense with an ad network, and AdSense does offer a basic ad auction platform.”).

opportunities,⁵ and they also provide other services, such as reporting and protections from spam and fraud.⁶

Google currently offers both ad server and ad auction platform functionality through Google Ad Manager (“GAM”), but the publisher ad server functionality used to be known as DoubleClick for Publishers (“DFP”) and the advanced ad auction platform functionality used to be known as AdX.⁷ Publishers claim that DFP has monopoly power in the market for ad servers and AdX has monopoly power in the market for advanced ad auction platforms.⁸

In addition to AdX, publishers also can use Google’s AdSense product (which their experts call a “basic ad auction platform”⁹) to sell their web inventory.¹⁰ By adding a single tag to their websites, publishers can easily offer inventory for sale on AdSense without needing to use a separate ad server.¹¹ Publishers claim that AdSense has monopoly power in a market for basic ad auction platforms.¹²

AdX and AdSense operate on a revenue-sharing model, in which Google keeps a

⁵ Earnhardt Decl., Ex. 1 (Elhauge Rep.) ¶ 36.

⁶ See, e.g., Sessions Decl., Ex. 32 (GOOG-AT-MDL-B-005253751) at -752 (describing metrics and visualizations to which publishers have access as part of AdX Bid Landscape reporting); Sessions Decl., Ex. 75 (Google AdSense Help, “Overview of AdSense Reports,” <https://support.google.com/adsense/answer/9831227> (last visited June 11, 2025)) (noting a variety of pre-made and custom reports available to AdSense users to “view trends and compare important metrics”); Sessions Decl., Ex. 39 (GOOG-DOJ-11357824) at -828 (Google “blocks more malware and spam than any other partner”).

⁷ Sessions Decl., Ex. 9 (Korula Decl.) ¶ 7. What Prof. Elhauge refers to as “advanced ad auction platforms” are more commonly known as “ad exchanges,” which was the term used in Publishers’ complaint. See Earnhardt Decl., Ex. 4 (Elhauge Tr.) 23:14-16 (“What the complaint alleges to be ad exchanges, I think, are the same thing that I found were advanced ad auction platforms.”); see also Publ. Compl. ¶ 84 (“Ad Exchanges are platforms enabling publisher Ad Servers to offer their inventory of impressions for sale, and advertisers to place bids on the impressions they wish to purchase. Ad Exchanges match advertisers and publishers programmatically using virtually instantaneous auctions known as ‘real time bidding’.”).

⁸ Publ. Compl. ¶¶ 158, 165.

⁹ See Earnhardt Decl., Ex. 1 (Elhauge Rep.) ¶ 207 (“In the submarket for basic ad auction platforms, AdSense was the only significant provider.”).

¹⁰ Sessions Decl., Ex. 10 (GOOG-AT-MDL-C-000073682) ¶ 2.

¹¹ See *id.* ¶ 3.

¹² Publ. Compl. ¶ 175.

percentage of the auction clearing price and passes the rest on to the relevant publisher.¹³ For example, for every \$100 spent on AdX for a publisher’s web inventory, Google retains about \$20 (i.e., about 20%) as compensation for AdX’s services and passes the remaining \$80 to the publisher.¹⁴ Similarly, the AdSense revenue share is currently 20% for web impressions.¹⁵

B. Tools for App Advertising

Publishers of mobile apps—known as “developers”—typically sell their app inventory to collections of advertisers buying through what are called mobile ad networks.¹⁶ To increase developers’ revenues and ensure that inventory would not go unsold, some mobile ad networks developed “mediation” functionalities that allowed them to aggregate demand not only from advertisers with which they had direct relationships, but also from other mobile ad networks.¹⁷

Developers can make their app inventory available to dozens of mobile ad networks.¹⁸ For a mobile ad network to have access to a developer’s app inventory, the developer must integrate with it through a software development kit (“SDK”).¹⁹ Some mobile ad networks provide their

¹³ Sessions Decl., Ex. 9 (Korula Decl.) ¶ 10; Sessions Decl., Ex. 10 (GOOG-AT-MDL-C-000073682) ¶ 8.

¹⁴ See Earnhardt Decl., Ex. 1 (Elhauge Rep.) ¶ 67.

¹⁵ Sessions Decl., Ex. 10 (GOOG-AT-MDL-C-000073682) ¶ 8.

¹⁶ See Sessions Decl., Ex. 73 (Google AdMob Help, “Ad network,” <https://support.google.com/admob/answer/3016695> (last visited June 11, 2025)) (“Ad network[:] An advertising network that you can use to serve ads to your app when you set up mediation. These may include third-party ad networks and the AdMob Network.”).

¹⁷ Sessions Decl., Ex. 41 (GOOG-DOJ-11786639) at -647-648 (“Admob mediation addressed [unsold inventory] by introducing multiple demand sources for a single impression. It helped maximize overall fill rate and increased total revenue by sending ad requests to multiple networks and ensuring the best network was picked to serve ads for a particular impression.”).

¹⁸ See Sessions Decl., Ex. 37 (GOOG-DOJ-07862640) at -643 (noting that AdMob provides “[m]ediation of 40 networks”); see also Earnhardt Decl., Ex. 1 (Elhauge Rep.) ¶ 402 (noting that developers “often opt to embed multiple SDKs with their apps,” with the average app having 65 or more SDKs as of 2023—each of which provides access to one or more networks).

¹⁹ See Sessions Decl., Ex. 16 (GOOG-AT-MDL-001967178) at -187.

own SDKs directly to developers,²⁰ while others rely on Google’s SDK.²¹

AdMob is Google’s mobile ad network, and developers seeking to sell app inventory through AdMob (or AdX²²) must integrate the “Google Mobile Ads (GMA) SDK” into their apps.²³ When app inventory is sold on AdMob (or AdX) using Google’s SDK, Google collects device signals, renders the ad creative, provides reporting services to the developer, and makes available protections from malware, invalid traffic, spam, and ad fraud.²⁴ As an alternative to using the GMA SDK, Google also offers mobile ad networks that buy app impressions on AdMob the ability to connect directly with developers using those networks’ own (i.e., “third-party”) SDKs.²⁵ When app impressions are sold on AdMob using a third-party SDK, Google runs the AdMob auction, but the third-party SDK is responsible for collecting device signals, rendering the ad creative, providing reporting services, and protecting against malware, invalid traffic, spam, and ad fraud.²⁶

Publishers carve app inventory out of their alleged relevant markets and focus exclusively

²⁰ See Sessions Decl., Ex. 74 (Google AdMob Help, “Mediation: About AdMob bidding ad sources,” <https://support.google.com/admob/answer/11555701> (last visited June 11, 2025)).

²¹ See Sessions Decl., Ex. 41 (GOOG-DOJ-11786639) at -651 (“Google does expect significant network partners to render their ads without SDK integration. However, not everyone is going to render through GMA SDK.”).

²² AdX can be used to transact app impressions, as well as web impressions. See Earnhardt Decl., Ex. 1 (Elhauge Rep.) ¶ 157.

²³ See Sessions Decl., Ex. 49 (Google Ad Manager Help, “Overview of apps with Ad Manager,” <https://support.google.com/admanager/answer/6238688> (last visited June 11, 2025)) (“If you have already added Google Mobile Ads (GMA) SDK in your mobile apps, you don’t need to make any changes. GMA SDK can be used for both Google Ad Manager and AdMob ads.”).

²⁴ See Sessions Decl., Ex. 16 (GOOG-AT-MDL-001967178) at -194-200; Sessions Decl., Ex. 24 (GOOG-DOJ-11786639) at -662-663; Sessions Decl., Ex. 39 (GOOG-DOJ-11357824) at -828.

²⁵ See Sessions Decl., Ex. 76 (Google Ad Manager Help, “Introduction to SDK Bidding,” <https://support.google.com/admanager/answer/13965829> (last visited June 11, 2025)) (“SDK Bidding allows third-party buyers to buy your mobile app inventory and to render creatives in your app by using an SDK owned by the buyer (as opposed to using the GMA SDK).”).

²⁶ See Sessions Decl., Ex. 45 (GOOG-DOJ-15226550) at -566-568; Sessions Decl., Ex. 26 (GOOG-AT-MDL-018191689) at -689; Sessions Decl., Ex. 27 (GOOG-AT-MDL-018798953) at -991; *see also id.* at -972 (3P SDK buyers “[r]equire . . . reporting”); Sessions Decl., Ex. 16 (GOOG-AT-MDL-001967178) at -202 (“SDKs responsible for: . . . Tracking billable events.”); *id.* at -208 (“[W]ithout installing and using the SDK, Facebook will not be able to provide install or app event reporting, and thus you will not have the option to use more advanced bidding options (oCPM, CPA) or see performance beyond clicks.”).

on “open web display” inventory.²⁷ They neither define any relevant market that includes app inventory nor allege that Google has monopoly power (or even market power) in any market that includes app inventory.

Historically, Google charged a 32% revenue share to app inventory buyers on AdMob, regardless of whether they relied on Google’s SDK or a third-party SDK.²⁸ In November 2021, Google reduced that fee to 10% when the buyer used a third-party SDK.²⁹ Since January 2022, Google has charged a 20% sell-side revenue share when its SDK is used to render an impression.³⁰

C. Prof. Elhauge’s Damages Calculations

On behalf of Publishers, Professor Einer Elhauge has offered opinions about market definition, monopoly power, six alleged tying restraints, and five alleged non-tying restraints.³¹ He also calculated that a putative class of publishers that used AdX incurred damages of \$1.7 billion and that a putative class of publishers that used AdSense incurred damages of \$600 million.³² Prof. Elhauge’s calculations account only for damages attributable to the alleged tying restraints. He did not attempt to quantify any measure of damages due to the alleged non-tying restraints.³³

Prof. Elhauge attempted to measure damages as the overcharge that publishers paid in the

²⁷ See Earnhardt Decl., Ex. 1 (Elhauge Rep.) ¶ 51; *see also id.* ¶¶ 153-167.

²⁸ Sessions Decl., Ex. 30 (GOOG-AT-MDL-019521367) at -369. Prof. Elhauge attributes 20 percentage points of AdMob’s historical 32% revenue share to the purported AdMob “ad auction platform.” Earnhardt Decl., Ex. 1 (Elhauge Rep.) ¶ 403. For purposes of this motion only, Google accepts that allocation of the AdMob revenue share.

²⁹ Sessions Decl., Ex. 20 (GOOG-AT-MDL-007334263) at -264. In April 2022, Google further decreased the AdMob fee for app inventory buyers using third-party SDKs to 5%. Sessions Decl., Ex. 24 (GOOG-AT-MDL-017386639) at -660.

³⁰ See Sessions Decl., Ex. 20 (GOOG-AT-MDL-007334263) at -264.

³¹ See Earnhardt Decl., Ex. 1 (Elhauge Rep.) ¶¶ 6-8.

³² *Id.* ¶¶ 455, 457.

³³ Earnhardt Decl., Ex. 4 (Elhauge Tr.) 174:21-175:11.

actual world, compared to a hypothetical “but-for” world without any alleged ties.³⁴ To do so, he multiplied class members’ sales volume by the difference between the actual AdX/AdSense rate for web transactions (approximately 20%³⁵) and a competitive “yardstick” rate.³⁶ With his “yardstick,” Prof. Elhauge sought to capture the price that Google would have charged for web transactions in the “but-for” world without any alleged ties.³⁷ Based on his analysis of a handful of Google documents, Prof. Elhauge chose a yardstick rate of 10% because that was the rate that Google charged beginning in November 2021 for app impressions transacted on AdMob and AdX using third-party SDKs.³⁸ Prof. Elhauge focused on the rate that Google charged for those transactions because he believed that they were not directly affected by any tying restraints, but he did not address any other differences between app and web transactions.³⁹

III. LEGAL STANDARD

The party offering expert testimony has the burden of showing its admissibility. *In re Pfizer Inc. Sec. Litig.*, 819 F.3d 642, 658 (2d Cir. 2016). To be admissible, expert testimony must (a) “help the trier of fact . . . to determine a fact in issue”; (b) be “based on sufficient facts or data”; (c) be “the product of reliable principles and methods”; and (d) “reflect[] a reliable application of

³⁴ Earnhardt Decl., Ex. 1 (Elhauge Rep.) ¶ 454 (“Based on the differences between the actual and but-for rates, I calculate in this section the total overcharge damages suffered by Class 1 and Class 2 publishers.”).

³⁵ AdSense charged a 32% revenue share until early 2024, when it lowered its revenue share to 20%. Earnhardt Decl., Ex. 1 (Elhauge Rep.) ¶ 68. For the period prior to this change, Prof. Elhauge attributes 20 percentage points of AdSense’s historical 32% revenue share to the purported AdSense “ad auction platform.” *Id.* For purposes of this motion only, Google accepts that allocation of the AdSense revenue share.

³⁶ Earnhardt Decl., Ex. 4 (Elhauge Tr.) 171:18-172:5 (explaining his method for calculating damages).

³⁷ Earnhardt Decl., Ex. 1 (Elhauge Rep.) ¶ 399 (discussing his analysis “quantifying the extent to which Google’s 20% ad auction platform rate exceeded the but-for rate it would have charged in a world without its Challenged Restraints. To do so, I use as a yardstick the rate that Google charged for its ad auction platforms in the portion of the market for auctioning *mobile* app ads that was not subject to similar tying restraints”).

³⁸ *Id.* ¶ 404; Earnhardt Decl., Ex. 4 (Elhauge Tr.) 172:6-15.

³⁹ Earnhardt Decl., Ex. 1 (Elhauge Rep.) ¶ 405; *see also* Earnhardt Decl., Ex. 4 (Elhauge Tr.) 173:9-18 (“Q. Do you believe that mobile app ad sales to authorized buyers using SDKs are a good competitive yardstick for web sales on AdX and AdSense because mobile app ad sales to authorized buyers using third-party SDKs were not affected by any tying restraints? A. I believe they’re a good competitive yardstick, yes, because they’re -- at least they weren’t directly affected by any tying restraints.”).

the principles and methods to the facts of the case.” Fed. R. Evid. 702. Under Rule 702, the court must perform a “gatekeeping” role and “undertake a rigorous examination of the facts on which the expert relies, the method by which the expert draws an opinion from those facts, and how the expert applies the facts and methods to the case at hand.” *Amorgianos v. Nat’l R.R. Passenger Corp.*, 303 F.3d 256, 265-67 (2d Cir. 2002); *see also Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 597 (1993) (emphasizing the “gatekeeping role [of] the judge”); *In re Mirena IUS Levonorgestrel-Related Prods. Liab. Litig. (No. II)*, 982 F.3d 113, 123 (2d Cir. 2020) (“[N]ot only was it appropriate for the district court to take a hard look at plaintiffs’ experts’ reports, the court was required to do so to ensure reliability.”).

An expert’s opinion must be reliable at each step of its reasoning: “*any step that renders the analysis unreliable . . . renders the expert’s testimony inadmissible.*” *Amorgianos*, 303 F.3d at 267 (citation omitted). In other words, where an expert “misapplies” an otherwise reliable methodology, the court should exclude that testimony. *See* Fed. R. Evid. 702 advisory committee’s note to 2000 amendment; *accord Amorgianos*, 303 F.3d at 269 (affirming exclusion of expert opinion that “rested on a faulty assumption due to [expert’s] failure to apply his stated methodology ‘reliably to the facts of the case’”).

“[E]ven otherwise qualified experts may not simply offer conclusory opinions.” *Tang Cap. Partners, LP v. BRC Inc.*, 757 F. Supp. 3d 363, 389 (S.D.N.Y. 2024) (citing *Major League Baseball Props., Inc. v. Salvino, Inc.*, 542 F.3d 290, 311 (2d Cir. 2008)). Expert testimony is inadmissible where it is “‘connected to existing data only by the *ipse dixit* of the expert,’ or when there is ‘simply too great an analytical gap between the data and the opinion proffered.’” *Bobcar Media, LLC v. Aardvark Event Logistics, Inc.*, 554 F. Supp. 3d 606, 612 (S.D.N.Y. 2020) (quoting *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997)); *see also Tang*, 757 F. Supp. 3d at 389

(“Conclusory opinions are a form of ‘*ipse dixit*,’ and an insufficient basis upon which to assess reliability.”).

IV. ARGUMENT

Prof. Elhauge’s damages opinions should be excluded because he did not reliably apply his yardstick methodology to the facts of this case. As a general matter, a yardstick methodology requires an expert to identify a market that is similar to the market at issue (except for the challenged conduct) and control for any factors (other than the challenged conduct) that could explain price differences between those markets. Prof. Elhauge, however, merely asserts that markets for web and app impressions are similar and ignores important differences between the ad tech tools used to sell them. Elsewhere, Prof. Elhauge claims that the markets for app ads are more competitive than those for web ads, but he does not control for those differences in his damages calculations. In short, Prof. Elhauge attributes to the alleged tying restraints the entire difference between the roughly 20% rate for web ad sales and his 10% yardstick rate for app ad sales using third-party SDKs, when the record demonstrates that there are other explanations for the rate differential. His failure to control for those other factors at all makes his application of the yardstick methodology unreliable, so the damages opinions based on that methodology should be excluded.

A. A Yardstick Analysis Must Compare Similar Markets and Control for Differences Between Them.

“Under the yardstick approach, damages are measured by obtaining a ‘but-for price’ from a market (the ‘comparable market’) that closely approximates the market in which the violation occurred. The ‘but-for price’ is a measure of what the price of the product would be if the wrongful behavior had not occurred.” Sessions Decl., Ex. 69 (Daniel L. Rubinfeld, *Antitrust Damages*, in RESEARCH HANDBOOK ON THE ECONOMICS OF ANTITRUST LAW 378, 380 (Einer Elhauge ed.,

2013)) (cited in Earnhardt Decl., Ex. 1 (Elhauge Rep.) ¶ 400 n.1009). “[T]he comparable market product should reflect the same degree of competition, the same costs, and the same demand conditions that would have prevailed in the market at issue had there been no wrongful behavior.”

Id. As Prof. Elhauge concedes, a “yardstick for assessing but-for outcomes should be a market that is similar to the market at issue but unaffected by similar anticompetitive restraints.” Earnhardt Decl., Ex. 1 (Elhauge Rep.) ¶ 400.

If an expert fails to control for factors (other than the challenged conduct) that could explain price differentials between the yardstick market and the market at issue, his damages calculations will wrongly attribute the entire price differential to the challenged conduct, resulting in improperly inflated damages. *See Sessions Decl., Ex. 65 (ABA SECTION OF ANTITRUST LAW, ECONOMETRICS 301 (2d ed. 2014))* (cited in Earnhardt Decl., Ex. 1 (Elhauge Rep.) ¶ 400 n.1009) (“A damages analysis, however, must isolate the impact of an allegedly illegal act from other potentially causal factors Because prices prevailing in the market likely were affected by a wide variety of other demand and supply factors unrelated to the alleged [anticompetitive conduct], isolating and measuring the effect of the alleged [conduct] on price requires properly accounting for these other factors.”).

Courts recognize that, for a yardstick analysis to generate a reliable estimate of damages, the expert must choose a yardstick market that is similar to the market at issue and control for any meaningful differences between the two. For example, in *In re Wholesale Grocery Products Antitrust Litigation*, 946 F.3d 995 (8th Cir. 2019), two grocery product wholesalers had allegedly allocated markets, leading to higher prices in the affected areas. *Id.* at 999. To calculate damages, plaintiffs’ expert used the change in prices charged by one large grocery store before and after the market allocation agreement was implemented as a benchmark for how a putative class of smaller

grocery stores was impacted. *Id.* The district court excluded the expert’s opinions because of his “failure to control for non-conspiratorial factors” and “inability to distinguish allegedly unlawful conduct” from other explanations. *Id.* at 1002-03. In affirming, the Eighth Circuit emphasized that “[i]t is the plaintiffs’ burden to establish the reliability of the posited expert testimony, including a determination of whether other factors affected the pricing at issue, if only to eliminate those factors” and concluded that, because the expert “failed to incorporate economic realities,” his “opinion was ultimately speculative” and properly excluded. *Id.* at 1003; *see also Weiner v. Snapple Beverage Corp.*, 2010 WL 3119452, at *7 (S.D.N.Y. Aug. 5, 2010) (excluding testimony of expert who did “not explain how his approach would isolate the impact of [allegedly unlawful conduct] from the other factors that purportedly affect the price of [defendant’s product] and its competitors”).⁴⁰

Similarly, in *City of Rockford v. Mallinckrodt ARD, Inc.*, 2024 WL 1363544 (N.D. Ill. Mar. 29, 2024), the defendants were accused of conspiring to raise the price of a drug (Acthar), and plaintiffs’ expert “estimate[d] class damages by calculating the difference between (1) the price of Acthar that in fact obtained and (2) the price that hypothetically would have obtained but for [the defendant’s] ‘anti-competitive practices.’” *Id.* at *5. The expert used a yardstick approach to determine the “but-for price” and “designate[d] the pharmaceutical industry as a whole as the relevant comparison market, with comparison prices derived from the Producer Price Index (PPI).” *Id.* at *6.

The court faulted the expert for “mak[ing] no effort to control for any other factors that might have affected Acthar’s price” (apart from the alleged conspiracy) and observed that “[t]he

⁴⁰ *See also In re Pharmacy Benefit Managers Antitrust Litig.*, 2017 WL 275398, at *18 (E.D. Pa. Jan. 18, 2017) (rejecting expert’s model for failing to “distinguish between unlawful and lawful explanations for the observed [price] differential”).

most obvious such factor is market share, which might have conferred enough market power to allow Acthar to command a price somewhat above the average.” *Id.* at *8 (cleaned up and citing *Blue Cross & Blue Shield United of Wis. v. Marshfield Clinic*, 152 F.3d 588, 594 (7th Cir. 1998) (concluding that “no reasonable jury could estimate the plaintiff’s damages” where plaintiff’s expert “failed to correct for the effect of market share on the [defendant’s] prices”). Further, because the expert provided “no analysis of the market structures for the drugs that compose the PPI” yardstick, the court determined that “the fundamental assumption underpinning the use of the PPI in the damages model—that there is at least a rough similarity between the two markets under consideration—is undermined, and the damages model is unreliable.” *Id.* at *8. In short, the “problem” with plaintiff’s model was its failure to “distinguish[] the effect of the unlawful conduct taken as a whole against any other factors that may have affected the price.” *Id.* at *9. Those deficiencies led the court to exclude the expert’s opinion as unreliable. *Id.* at *10.

As explained below, Google provides significantly fewer services for app transactions using third-party SDKs than for web transactions on AdX and AdSense. But like the excluded experts in *Wholesale Grocery Products* and *City of Rockford*, Prof. Elhauge makes no attempt to disentangle how much of the roughly 10% rate differential can be explained by different levels of service, as opposed to the alleged tying restraints. Nor does Prof. Elhauge make any adjustment for allegedly greater competition in markets for app transactions than web transactions. Because of these deficiencies, Prof. Elhauge’s damages calculations should be excluded as unreliable.

B. Prof. Elhauge Ignores That Publishers Receive More Services When They Sell Web Ads on AdX and AdSense Than When They Sell App Ads Using Third-Party SDKs.

Google provides more services to publishers using AdX and AdSense to sell web impressions than it provides to developers using third-party SDKs to sell app impressions. These different levels of service could explain some or all of the roughly 10% difference in the rates for

web and app impressions, but Prof. Elhauge does nothing to control for them in his damages calculation. He simply assumes that the alleged tying restraints are responsible for the entire roughly 10% rate difference.

Prof. Elhauge asserts that “[t]he markets for open-web display ads and mobile app ads are similar in many ways” because they both involve the sale of “ad impressions through auctions,” “the same sorts of advertisers buy[]” both web and app impressions, and the “users who view the ads are also similar.” *See* Earnhardt Decl., Ex. 1 (Elhauge Rep.) ¶ 401. But these high-level similarities gloss over several meaningful differences between the services that Google provides to web publishers using AdX and AdSense, on the one hand, and app developers using third-party SDKs, on the other.⁴¹

First, Google integrates more buyers when publishers use AdX and AdSense for web transactions than when developers use third-party SDKs for app transactions. For web transactions, Google aggregates demand from many buyers on AdX and AdSense so that publishers can access all that demand by using Google’s ad auction platform.⁴² By contrast, developers selling app impressions must establish their own separate, direct relationships with each buyer that uses a third-party SDK. *See* Sessions Decl., Ex. 15 (GOOG-AT-MDL-001965781) at -790 (recognizing that mobile ad networks with third-party SDKs have “direct relationships with publishers”); Sessions Decl., Ex. 19 (GOOG-AT-MDL-006216826) at -834 (describing “[d]irect relationship between pub and buyer”). Integrating each of these SDKs into a developer’s app requires time and other resources, and those investments multiply with the number of SDKs

⁴¹ *See* Earnhardt Decl., Ex. 1 (Elhauge Rep.) ¶ 409 (“Nor have I seen any other evidence that the costs and value of Google’s ad auction platform (whether for mobile app ads or open-web display ads) are any different for transactions covered by its tying versus for transactions not covered by its tying.”).

⁴² *See* Sessions Decl., Ex. 9 (Korula Decl.) ¶¶ 5, 9 (noting AdSense and AdX publishers get access to a variety of inventory, including from Google’s hundreds of Authorized Buyers).

involved. *See* Earnhardt Decl., Ex. 1 (Elhauge Rep.) ¶ 402 (noting in 2023, iOS apps had an average of 72 SDKs and Android apps an average of 65).⁴³ As Google recognized, the “[p]ub[lisher] has to do a lot of work to integrate” with third-party SDKs. Sessions Decl., Ex. 19 (GOOG-AT-MDL-006216826) at -834; *see also* Sessions Decl., Ex. 27 (GOOG-AT-MDL-018798953) at -972 (noting that app developers using third-party SDKs must perform “SDK integration, thorough testing, [and] ads review”). Even after an SDK is integrated into an app, the developer must incur additional costs to maintain it. *See* Sessions Decl., Ex. 28 (GOOG-AT-MDL-018800394) at -418 (“[T]he cost is at least a little more th[a]n just one time. It also involves getting publishers to integrate and enable as well as[] keep[ing] adapters and sdks up to date especially as new formats become available.”).

The evidence that Google’s web tools provide publishers with valuable “one-stop shops” for reaching web ad buyers could explain why Google can charge a 20% rate on web ad sales, and why it charges less to developers that undertake the work of integrating directly with app ad buyers using third-party SDKs. *See* Sessions Decl., Ex. 20 (GOOG-AT-MDL-007334263) at -264 (“3P SDK integration implies direct relationship and/or contract between the buyer and the publisher, which is usually associated with lower rev share[.]”). For those app transactions where developers rely on Google’s SDK to integrate demand from multiple buyers, they pay the same 20% rate that publishers pay on web transactions on AdX and AdSense. *See id.* (noting that 20% revenue share applies for sales to buyers that use Google’s SDK to render the impression); *see also* Earnhardt Decl., Ex. 1 (Elhauge Rep.) ¶ 403 (same). This undisputed evidence that publishers pay Google 20% on app transactions using Google’s SDK, when they could pay 10% if they used third-party

⁴³ According to Publishers’ industry expert, Anand Das, it can take a developer up to 1-2 days to add a single third-party SDK, so the integration of 70 SDKs could result in up to two to five person-months of additional work. *See* Earnhardt Decl., Ex. 6 (Das Rebuttal Rep.) ¶ 186.

SDKs, demonstrates that Google’s SDK provides additional value, including saving developers from the costs of integrating their apps separately with each of many different buyers, as well as better reporting and greater protection from malware, invalid traffic, and ad fraud (as discussed below).

Prof. Elhauge tries to minimize the “benefits of using a single SDK, rather than incurring the costs of using multiple SDKs to reach buyers,” by citing a statement that “whatever costs are imposed by having [multiple] SDKs are commonly seen to be eclipsed by the revenue benefits.” Earnhardt Decl., Ex. 3 (Elhauge Rebuttal Rep.) ¶ 613 (citing Sessions Decl., Ex. 16 (GOOG-AT-MDL-001967178) at 182). But that statement speaks only to why some publishers would want to integrate with multiple demand sources; it does not refute that publishers incur costs when they do so using third-party SDKs or that other publishers willingly pay 20% to avoid those costs and rely on Google’s tools to integrate multiple demand sources for them.

Second, Google provides different levels of reporting services for web and app transactions. For web transactions via AdX and AdSense, Google supplies publishers with a variety of reports covering all buyers. *See, e.g.*, Sessions Decl., Ex. 32 (GOOG-AT-MDL-B-005253751) at -752 (describing metrics and visualizations to which publishers have access as part of AdX Bid Landscape reporting); Sessions Decl., Ex. 75 (Google AdSense Help, “Overview of AdSense Reports,” <https://support.google.com/adsense/answer/9831227> (last visited June 11, 2025)) (noting a variety of pre-made and custom reports available to AdSense users to “view trends and compare important metrics”). By contrast, developers using third-party SDKs for app transactions are responsible for separately managing reports from each SDK for themselves, without Google’s assistance.⁴⁴

⁴⁴ *See, e.g.*, Sessions Decl., Ex. 27, (GOOG-AT-MDL-018798953) at -972 (3P SDK buyers “[r]equire . . . reporting”); Sessions Decl., Ex. 16 (GOOG-AT-MDL-001967178) at -202 (“SDKs responsible for: . . . Tracking billable events.”);

In response to this evidence that “AdMob charged higher rates for ads purchased using its SDK, in part, because [of] its superior data collection and analytics,” Prof. Elhauge cites a document purporting to show that Google’s “SDK app analytics were *inferior* and that most developers did not rely on Google for the collection of data and signals.” *See* Earnhardt Decl., Ex. 3 (Elhauge Rebuttal Rep.) ¶ 611. But that document explains that some buyers prefer for publishers to use their own third-party SDKs because those SDKs give buyers “better signal collection.” Sessions Decl., Ex. 17 (GOOG-AT-MDL-001973033), at -034. It does not rebut the evidence that publishers value the superior reporting that Google provides for web sales with AdX and AdSense over app sales with third-party SDKs. That better reporting may explain some or all of the 10% rate differential that Prof. Elhauge attributes entirely to the alleged tying restraints.

Third, Google provides greater protection from malware, invalid traffic (IVT), and ad fraud for web transactions using AdX and AdSense than for app transactions using third-party SDKs. For AdX and AdSense web transactions, Google provides “best in industry [protections] against invalid traffic,” *see* Sessions Decl., Ex. 36 (GOOG-DOJ-06241817) at -817, and “blocks more malware and spam than any other partner.” Sessions Decl., Ex. 39 (GOOG-DOJ-11357824) at -828; *see also* Sessions Decl., Ex. 64 [REDACTED]

[REDACTED] But “[s]ince [Google] can’t render the creative without the third-party SDK, [Google] can’t scan for malware or detect 3P vendor pixels” on app transactions using those SDKs. *See* Sessions Decl., Ex. 45 (GOOG-DOJ-15226550) at -568. Buyers using third-party SDKs “have their own systems” to address concerns such as invalid traffic, *see* Sessions Decl., Ex. 26 (GOOG-AT-MDL-018191689)

id. at -208 (“[W]ithout installing and using the SDK, Facebook will not be able to provide install or app event reporting, and thus you will not have the option to use more advanced bidding options (oCPM, CPA) or see performance beyond clicks.”).

at -689, but they are much less effective than Google’s protections. For example, “SDK bidders have at least an order of magnitude more malware” than Google. *See Sessions Decl., Ex. 27 (GOOG-AT-MDL-018798953) at -991.*

Prof. Elhauge does not contend that developers using third-party SDKs for app transactions receive the same level of protection from malware, invalid traffic, and ad fraud as publishers that use AdX and AdSense for web transactions (or Google’s SDK for app transactions). Instead, he cites two documents to support his claim that Google was able to “scan creatives of third-party SDK-rendered transactions.” *See Earnhardt Decl., Ex. 3 (Elhauge Rebuttal Rep.) ¶ 612 & n.1575.* Contrary to Prof. Elhauge’s interpretation of those documents, Google’s public help page explains that “Ad Manager doesn’t currently support creative scanning for SDK bidders.”⁴⁵ Regardless, Prof. Elhauge does not claim that any scanning protected publishers as effectively when buyers use third-party SDKs. In fact, one of Prof. Elhauge’s cited documents highlights how, “[i]n the mobile app world, Google receives an opaque blob which is unique to each SDK. Each . . . has their own proprietary means of describing how to fetch the asset to their SDK. And because of this, [Google’s] platform has a limited ability to scan these, even if [it] support[s] the underlying ad type[.]” *Sessions Decl., Ex. 27 (GOOG-AT-MDL-018798953) at -979.*

In light of the evidence that app transactions with third-party SDKs receive less protection from malware, invalid traffic, and ad fraud than web transactions on AdX and AdSense, Prof. Elhauge had no basis to assume that the full 10% difference in rates on web versus app transactions could be chalked up solely to the alleged tying restraints. Some or all of that difference could be explained by the fact that publishers valued the stronger protections that Google provided for web transactions, and Prof. Elhauge has performed no analysis to rule out that alternative explanation.

⁴⁵ *Sessions Decl., Ex. 76* (Google Ad Manager Help, “Introduction to SDK Bidding,” <https://support.google.com/admanager/answer/13965829> (last visited June 11, 2025)).

Although the “[r]ev share depends on the services Google offers,” Sessions Decl., Ex. 28 (GOOG-AT-MDL-018800394) at -395, Prof. Elhauge fails to analyze the value of the additional services that Google provides for web transactions using AdX and AdSense beyond those provided for app transactions using third-party SDKs. As in *City of Rockford*, Prof. Elhauge’s yardstick methodology fails to account for “any other factors that may have affected the price” apart from the conduct at issue (e.g., the additional services that Google provides for web transactions), so his opinions based on that unreliable methodology should be excluded. *See City of Rockford*, 2024 WL 1363544, at *9-10; *see also Wholesale Grocery Prods.*, 946 F.3d at 1003 (emphasizing “plaintiffs’ burden to establish the reliability of the posited expert testimony, including . . . whether other factors affected the pricing at issue, if only to eliminate those factors”).

C. Prof. Elhauge Fails to Control for Alleged Differences in Competitive Conditions for Web and App Transactions.

Prof. Elhauge attributes to the alleged tying restraints the entire roughly 10% difference between the rate for his yardstick app transactions and the rate for web transactions on AdX and AdSense,⁴⁶ but his own reports describe another reason for the difference. Specifically, he argues that Google faced “competitive pressure” that “drove Google in November 2021 to lower the rate to 10%” for app transactions using third-party SDKs. *See Earnhardt Decl.*, Ex. 1 (Elhauge Rep.) ¶ 406; *see also Earnhardt Decl.*, Ex. 3 (Elhauge Rebuttal Rep.) ¶ 610 (“Google felt competitive pressure . . . and had to compete with rival mobile app ad auction platforms who were charging 5-10%.”).⁴⁷ But if Prof. Elhauge is correct that greater “competitive pressure” led to lower rates for

⁴⁶ *See Earnhardt Decl.*, Ex. 3 (Elhauge Rebuttal Rep.) ¶ 599 (“[M]y overcharge calculation conservatively measures only the harm created by the challenged tying restraints.”).

⁴⁷ Publishers’ industry expert, Anand Das, similarly pointed to “extensive record evidence that Google lowered its revenue share [for third-party SDK transactions] in response to competitive pressures.” *Earnhardt Decl.*, Ex. 6 (Das Rebuttal Rep.) ¶ 193.

yardstick app transactions than for web transactions on AdX and AdSense,⁴⁸ then he should not have simply assumed that the full rate differential was caused by the alleged ties. Instead, he should have controlled for how much of the roughly 10% rate differential could be explained by different competitive conditions for web and app transactions (as well as the other factors discussed above) before attributing any remaining difference in rates to the alleged ties. After all, as Prof. Elhauge recognized in a prior case, “‘yardstick’ markets are not reliable estimates of but-for prices if one does not control for key differences between the yardstick markets and the market at issue.”⁴⁹

Prof. Elhauge’s failure to control for what he describes as different competitive conditions would penalize Google not only for any ties ultimately found to be unlawful, but also for possessing lawfully acquired market power. As the Second Circuit has explained:

[M]ore than monopoly power is necessary to make the charging of a noncompetitive price unlawful. Accordingly, ***a purchaser may recover only for the price increment that “flows from” the distortion of the market caused by the monopolist’s anticompetitive conduct.*** . . . Were the law otherwise, it would establish an unnecessary and unwarranted trigger mechanism. A pristine monopolist, we have held, may charge as high a rate as the market will bear. But under the competitive price rule, if it committed any anticompetitive conduct beyond a De minimis Level it would suddenly be held liable for threefold the entire excess of its price over a competitive price. In effect, instead of being required simply to compensate its customers for the consequences of its wrongful action, it would be required to forfeit its legitimately acquired advantage.

Berkey Photo, Inc. v. Eastman Kodak Co., 603 F.2d 263, 297-98 (2d Cir. 1979) (emphasis added and citation omitted). The Second Circuit concluded that “the true measure of damages . . . is the price increment caused by the anticompetitive conduct that originated or augmented the monopolist’s control over the market,” not “the entire excess of the monopolist’s price over that

⁴⁸ Google disputes that markets for web transactions are less competitive than markets for app transactions.

⁴⁹ Sessions Decl., Ex. 29 (Rebuttal Merits Expert Report of Professor Einer Elhauge, *Castro v. Sanofi Pasteur Inc.*, No. 11-CV-07178 (D.N.J. Sept. 16, 2016), ECF No. 469-11) ¶ 970.

which would prevail in a competitive market.” *Id.* at 297; *see also U.S. Football League v. Nat’l Football League*, 842 F.2d 1335, 1378 (2d Cir. 1988) (“Whatever latitude is afforded antitrust plaintiffs as to proof of damages . . . is limited by the requirement that the damages awarded must be traced to some degree to unlawful acts.”).

Contrary to *Berkey Photo*’s holding, Prof. Elhauge calculates damages as the “entire excess” of the roughly 20% rate for web transactions on AdX and AdSense over the price that he believes “would prevail in a competitive market” (i.e., the 10% rate on app transactions using third-party SDKs). *Berkey Photo*, 603 F.2d at 297. To calculate “the true measure of damages,” Prof. Elhauge would have had to control for any differences in competitive conditions that he believes exist for web and app transactions to isolate “the price increment caused by” the alleged tying restraints.⁵⁰ *Id.* Because he failed to do so, his damages calculations should be excluded. *See City of Rockford*, 2024 WL1363544, at *8 (excluding opinion of expert who “ma[de] no effort to control for any other factors that might have affected [the defendant’s] price” and observing that “[t]he most obvious such factor is market share, which might have conferred enough market power to allow [the defendant] to command a price somewhat above the average”); *see also Blue Cross*, 152 F.3d at 594 (concluding that “no reasonable jury could estimate the plaintiff’s damages” where plaintiff’s expert “failed to correct for the effect of market share on the [defendant’s] prices”).

V. CONCLUSION

For the foregoing reasons, Prof. Elhauge fails to reliably apply a yardstick methodology to the facts of this case, so his damages opinions should be excluded.

⁵⁰ Those controls are especially important because Prof. Elhauge contends that AdX has had a “high market share” since it first “launched.” *See Earnhardt Decl., Ex. 3 (Elhauge Rebuttal Rep.)* ¶ 28 (“In the case of AdX, it was one of the only auction platforms on the market when Google launched it in 2009, such that it had a high market share at that time . . .”).

Dated: June 16, 2025

Respectfully Submitted,

/s/ Justina K. Sessions

Justina K. Sessions

FRESHFIELDS US LLP

855 Main Street

Redwood City, CA 94063

Telephone: (650) 618-9250

Email: justina.sessions@freshfields.com

Eric Mahr

Andrew J. Ewalt

FRESHFIELDS US LLP

700 13th Street, NW, 10th Floor

Washington, DC 20005

Telephone: (202) 777-4500

Email: eric.mahr@freshfields.com

andrew.ewalt@freshfields.com

Craig M. Reiser

AXINN, VELTROP & HARKRIDER LLP

630 Fifth Avenue, 33rd Floor

New York, NY 10111

Telephone: (212) 728-2200

Email: creiser@axinn.com

Bradley D. Justus

AXINN, VELTROP & HARKRIDER LLP

1901 L Street, NW

Washington, DC 20036

Telephone: (202) 469-3532

Email: bjustus@axinn.com

Counsel for Defendants Google LLC,

Alphabet Inc., and YouTube, LLC